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## FACT SHEET

### Lead/Copper

#### *What are Lead and Copper and How Are They Used?*

Lead is a metal found in natural deposits as ores containing other elements. It is sometimes used in household plumbing materials or in water service lines used to bring water from the main to the home.

#### *Why is Lead/Copper being Regulated?*

In 1974 Congress passed the Safe Drinking Water Act. This law required EPA to determine safe levels of chemicals in drinking water which do or may cause health problems. These non-enforceable levels, based solely on possible health risks and exposure, are called Maximum Contaminant Level Goals.

The MCLG for lead has been set at zero because EPA believes this level of protection would not cause any of the potential health problems described below.

Since lead and copper contamination generally occur from corrosion of household lead pipes, they cannot be directly detected or removed by the water system. Instead, EPA requires water systems to control the corrosiveness of their water if the level of lead or copper at home taps exceeds an Action Level.

The Action Level for lead is 0.015 milligrams per liter (mg/l) which is equivalent to 15 parts per billion (ppb). For copper, the Action Level is 1.3 mg/l or 1,300 ppb. This Action Level was not designed to measure health risks from water represented by individual samples. Rather, it is a statistical trigger value that, if exceeded, requires more treatment, public education and possibly lead service line replacement.

These standards are called the National Primary Drinking Water Regulations, and all public water supplies must abide by these regulations.

#### *What Are The Long-Term Health Effects?*

Short and long-term health effects: Lead can cause a variety of adverse health effects when people are exposed to it at levels above the action level for relatively short periods of time.



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The long-term health effects include the potential to cause stroke and kidney disease as well as cancer.

*How Will Lead/Copper Be Detected and Removed From My Drinking Water?*

The regulation for lead became effective in 1992. Between 1993 and 1995, EPA required water suppliers to collect water samples from household taps twice a year and analyze them to find out if lead is present above 15 ppb or copper is present above 1300 ppb in more than 10 percent of all homes tested. If it was present above this level, the system continued to monitor twice a year.

If lead and/or copper levels were found to be consistently above the action levels, the water supplier was mandated to take steps to reduce the amount of lead/copper so that it was consistently below the action level.

*Corrosion Control Treatment*

The City of Rockford minimizes corrosion (release of lead/copper) in our distribution system by using water treatment chemicals that are food grade polyphosphates. This treatment coats the inside of the plumbing and provides a barrier inhibiting these chemicals from being release into drinking water.

The drinking water is monitored every three years as mandated by the IEPA to ensure that there is no lead or copper above the action levels present.